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CENTRAL INTELLIGENCE AGENCY

18 March 1949

INTELLIGENCE MEMORANDUM NO. 146

SUBJECT: Soviet Deficiency in Strategic Items in 1952

1. General.

For purposes of this paper, stockpiling is defined as the accumulation of materials on a national basis for meeting a national emergency, this accumulation being in excess of quantities normally held in the pipeline or as normal industrial reserves. No attempt has been made to assess the feasibility of obtaining these items from the possible sources of supply noted.

The Soviet bloc is considered to comprise of: Albania, Bulgaria, Czechoslovakia, Finland, Germany (Soviet Zone), Hungary, Poland, Rumania, USSR, and Yugoslavia.

2. Minerals.

The Soviet orbit will be deficient in 1952 in the production of the minerals listed below together with the sources of supply. (Stockpiling will probably largely offset deficiencies.)

Industrial diamonds: Belgian Congo, South Africa, Brazil.

Molybdenum<sup>1</sup>: South Korea, China, Norway

Cobalt: Belgian Congo, Northern Rhodesia, Finland

Tin: Malaya, N.E.I., Siam, Burma, China

Tungsten: Korea, China, Bolivia

Copper<sup>2</sup>: Chile, Rhodesia, Belgian Congo

Lead<sup>2</sup>: Mexico, Peru, Burma, Australia

Beryl<sup>3</sup>: Brazil, Argentina, India

Columbite<sup>3</sup>: Nigeria, Brazil, Belgian Congo

Tantalite<sup>3</sup>: Nigeria, Brazil, Belgian Congo

<sup>1</sup>Unless Manchurian deposits are developed sufficiently.

<sup>2</sup>Sufficient if Yugoslav production is available.

<sup>3</sup>Development of reserves unknown.

Note: This IM, prepared on short notice from data in CIA files, has not been coordinated with the intelligence organizations of the Departments of State, Army, Navy, and the Air Force.

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### 3. Rubber.

USSR's present production of synthetic rubber is substantial and sufficient to supply present processing facilities of the USSR, as well as most of the processing needs of the satellite nations. In addition, the satellite nations are planning small-scale synthetic rubber industries in their own countries, some of which may be operating by 1953 and would add to the general supply picture.

Natural rubber must be imported. USSR imported 130,000 tons of natural rubber in 1948 from Southeast Asia. It is estimated that the USSR has stockpiled 75,000 - 100,000 tons of natural rubber so far.

However, in judging the rubber situation by 1953, certain possibilities must be considered. Although the military needs have not been estimated, it is believed that the USSR and satellites will have sufficient fabricating capacity for an initial war effort. As for sustaining a long war, it probably would face serious difficulties unless certain steps, such as the establishment of additional synthetic capacity, were taken. USSR understands the problem and is continuing research and development on synthetic rubber.

Stockpiling of natural rubber, if continued at its present rate of from 75,000 - 100,000 tons per annum would, by 1953, reach an amount sufficient, at present rate of consumption, for 5-10 years' requirements. Improvement of synthetic rubber for use in tires and other military articles may reach the stage at which a substantially smaller percentage of natural rubber will be needed.

### 4. Industrial Machinery, Equipment, and Components.

The greatest deficiency in this line will be in spare and repair parts of imported capital equipment and consumable items for use in capital equipment. For instance, in the field of machine tools, such spare and repair parts as gears, valves, bearings, and minor assemblies, will be deficient.

Tools and accessory materials necessary for operation of foreign-made machine tools, i.e., dies, jigs, fixtures, taps, reamers, drills, abrasive products (wheels, honing sticks, etc.) will be deficient, although small stockpiles are on hand at present.

It is estimated that, even by 1952, only one out of four Soviet bloc inventory machine tools will be of Soviet bloc manufacture. The remaining inventory will be primarily of German, US, UK manufacture (in that order), although Swiss and Swedish manufactures will consist of small but vital segments of the inventory.

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#### 5. Electrical Equipment.

Essential materials involved in the operation of electric power plants are such expendable components as boiler tubes, condenser tubes, pump parts, turbine blades, ball bearings, and thrust bearings. Except for accidental damage, electrical generating machinery require virtually no replacement parts. The same is true for sub-station and transmission line equipment.

At present, boiler tubes and ball bearings are known to be in deficient supply, but the degree of deficiency in 1952 cannot be accurately measured.

There is no present evidence of stockpiling of the above components, nor is it believed that a significant amount of stockpiling can be accomplished by 1952.

With the possible exception of USSR (as to boiler and condenser tubes only), none of the Soviet bloc countries are self-sufficient for the above items and the outside sources of supply are UK, Sweden, Switzerland, Italy, Western Europe, and USA.

#### 6. Hard Fibers.

USSR imported 14,000 tons of hard fibers (sisal, henequen, and manila) in 1938. There were no imports in 1946. About 1,400 tons were imported in 1947, and 30,800 tons in 1948. Hard fibers are not produced internally within the Soviet bloc. It is probable that purchases in 1948 included amounts to be stockpiled. Stockpiles, therefore, may make up for any possible inability to import in 1952. Native hemp (in good supply) in the Soviet bloc could be used to some extent as a substitute for the hard fibers. In 1948, Mexico was the chief supplier.

#### 7. Petroleum.

It is estimated that deficiencies of aviation gasoline will continue to be in prospect for the Soviet Union in 1952 because of limited aviation gasoline equipment capacity. There will be acute shortages of aviation gasoline and lubricating oils in the Satellites in 1952.

The Soviets have pursued a plan to establish a reserve of POL products by vigorous exploitation of indigenous crude oil, stringent allocation of domestic production, utilization of synthetic fuels, and imports from the Satellites. The extent to which a surplus has been built up for strategic purposes cannot be accurately estimated since available information does not allow for any differentiation between a

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commonly followed industrial practice of keeping reserves on hand and the accumulation of surpluses for strategic purposes. Nevertheless, there has been substantial evidence that the Soviets have implemented a strategic POL stockpiling project.

Recent American curtailment of exports to the Soviet Union of high-octane gasoline, lubricating oils, and special blending agents discontinued the Soviet Union's main source of outside supply. Should the USSR find it impossible to stockpile from indigenous production, it is likely to call on Rumania to provide additional supplies so that the provision of some oil for stockpiling seems reasonably certain in any event. Outside sources of supply for the Satellites are the Middle East, Venezuela, the US, Italy, Tangier, and France.

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